**B. pulverina**, nov. sp. Antennæ brown. Eyes black; head, thorax, body and legs light straw color. Primaries have the ground color, costa and fringes light yellow, but are densely powered with brownish black, so that only a few yellow maculations are visible. These are a few subterminl, irregular blotches along margin, of subtriangular shape, pointed inwardly. Two large spots, one in centre and one at end of cell; basal dashes and tinges along centre of inner margin.

Secondaries of uniform light straw color, sub-diaphanous. Below, primaries suffused grayish black, with yellow grains along costa, and faint traces of the yellow maculations. Secondaries as above. Expanse of wings: 31–32 mm.

Length of body: 5-6 mm.

Types & Coll. B. Neumoegen.

Habitat: Western Colorado. Caught by Mr. Bruce, who says that the insect has the same habits as the other Lithosians flying in that region. *Hypoprepia inculta* Hy. Edw., with which it flies in common, will, upon closer examination by Mr. Dyar and myself, probably be placed in the same genus.

## ON THE FOOD-HABITS OF NORTH AMERICAN RHYNCHOPHORA.

By WM. BEUTENMULLER.

I herewith beg leave to present the following paper on the Food-Habits of North American (except the Scolytidæ) in place of the one I published on the same subject in the Canadian Entomologist, Vol. XXII, pp. 200 and 258. I am under special obligation to Dr. John Hamilton for sending me his notes on this subject, for which he has my thanks.

Auletes cassandræ Lec.—Found by Messrs, Hubbard and Schwarz on Cassandra calyculata. (Rhyn, N. Am., p. 5). Beaten from Myrica cerifera (Bayberry) by Dr. Hamilton, at Brigantine Beach, N. J., also taken on Sweet-fern by Mr. J. D. Sherman.

Auletes ater Lec.—Taken on the leaves of the Sweet-fern in September, by Mr. J. D. Sherman, and also by Mr. Wm. Jülich. (Cat. Ins. N. J., p. 246).

**Eugnamptus collaris** *Fab*, and **E. augustatus** *IIbst*.—Both these species occur on the leaves of different kinds Hickories.

Eugnamptus striatus Lee.—Found on Scrub-Oak in Florida by Mr. Schwarz. (Proc. Am. Phil. Soc., Vol. xviii, p. 464).

**Rhynchites bicolor** Fab.—Lives on various kinds of Wild Roses.

Rhynchites æratus Sar,—Taken on Willow by Dr. Packard. (5th Rep. U. S. Ent. Com., p. 599). R. Cranellus, is also found on Willow. (Harrington, Can. Ent., Vol. XXIII, p. 21).

Rhynchites hirtus Lee.—Taken in July on the Rosin-weed, (Silphium integrifolium), cutting the stems. (Forbes, 5th Rep. Nox. Ins. Illinois, p. 75).

**Pterocolus ovatus** Fab.—Feeds on the leaves of Wild-Grape sprouts, according to Dr. J. Hamilton. I have beaten it from Live Oak trees in Florida. Also found on Oak by Mr. Julich. (Cat. Ins. N. J., p. 247).

Attelabus rhois Boh.—Lives on Oak and on Hazel (Hamilton). Rolls up the leaves of Alder. (Packard, 5 Rep. U. S. Ent. Com., p. 632). Taken on Oak, Basswood and doubtfully on Birch, by Mr. Harrington. (Can. Ent., Vol. XXIII, p. 21).

Attelabus bipustulatus Fab.—Lives on Oak, rolling up the leaves (Murtfeldt, Can. Ent., Vol. 1V, p. 143). A. analis III. and A. nigripes Lec. also live on Oak. The latter species I have beaten from Live Oak at Kissimmee, Florida, in April. It also rolls up the leaves of Sumac (Rhns glabra) according to Prof. Popenoe (Trans. Kan. Ac. Sc., Vol. V, p. 38) and was observed by Mr. Geo. Hunt on the Walnut before the buds open (5th Rep. U. S. Ent. Com., p. 335).

**Graphorhinus vadosus** Sar,—Feeds in the imago state on the leaves of clover. (Webster), Am. Nat., Vol. xvi. p. 746).

Anametis grisea *Horn.*—The larvæ live in stems of *Ambrosia trifida*, (Hamilton), and according to Dr. Riley under the bark of Apple and Pear. (Am. Nat. Vol., xvi, p. 916).

**Ophryastes vittatus** Say.—Is chiefly found on "Greasewood" as is also *O. sulcirostris* Say., and *O. latirostris* Lee, according to Mr. Wickham. (Ent. Am., Vol. v, p. 77).

Panscopus erinaceus .Say.—Occurs on Wild Grape. (Schwarz) Bull, Brooklyn, Ent. Soc., Vol. vii, p. 84).

**Diamimus subsericeus** *Horn*,—Taken around the roots of Cotton-wood by Mr. Wickham. (Ent. Am., Vol. v, p. 78).

Rhigopsis effracta *Lec.*—Lives on the Yucca. (Leconte and Horn, Rhyn. N. Am., p. 37).

Agraphus bellicus Say.—Found on Golden-rod. (Jülich, Cat. Ins. N. J., p. 248).

**Epicærus imbricatus** *Say*.—According to Dr. Riley this species is injurious to the Apple and Cherry trees and Gooseberry bushes, by gnawing the twigs and fruit. It is also said to be found on Cabbage, Onion, Raddish, Watermelon, Cucumber, Beet, Squash and Potato Plants.

Exomias pellucidus Boh.—I have first taken this European beetle at Astoria, L. I., in 1884, and again on Staten Island in 1886. In Europe it is said to live on the Strawberry. (Ent. Am., Vol. v, p. 188).

**Otiorhynchus sulcatus** Fab.—This European species is destructive to a variety of horticultural plants. In the larval stage it attacks the roots of the Strawberry. O. ovatus Linn, also infects the roots of this plant.

**Aragnomus griseus** *Horn.*—Recorded by Dr. Riley as an enemy to Pear trees in Oregon. (Insect Life, Vol. 1, p. 16).

**Phyxelis rigidus** *Say*.—Is beaten abundantly from herbage in swampy places. (Hamilton).

Neoptochus adspersus Boh.—Found on Oak in Florida. (Schwarz, Proc. Am. Phil. Soc., Vol. xviii, p. 465).

Pachnæus distans Horn.—Found on Pine and Oak trees in Florida. (Schwarz, Proc. Am. Phil. Soc. Vol. xviii, p. 465). P. opalus Oliv. is injurious to the orange (Riley, Am. Nat., Vol. xvi, p. 916).

**Tanymecus confertus** *Gyll.*—Appears to be polyphagus, without preference to any particular plant. (Riley, Am. Nat., Vol. XVI. p. 916). The larva lives and hibernates in the stems of *Ambrosia trifida*, and without entering the ground becomes a beetle about June. (Hamilton).

**Brachystylus acutus** *Say*.—According to Dr. Riley is found on Persimmon. (Am. Nat., Vol. xvi, p. 916).

Aphrastus tæniatus Gy//.—Breeds abundantly in the roots of various coarse grasses, especially such growing in alluvial fields. (Dr. Hamilton).

Pandeletejus hilaris IIIst.—Lives in the trunk of the White Oak. (Harris, Ins. Inj. Veget., p. 70), also found on Beech trees by Mr. Chittenden.

Artipus floridanus Horn.—Is injurious to the Orange. (Riley, Am. Nat., Vol. xvi, p. 916).

**Aramigus tessellatus** Say.—According to Prof. Popenoe infests the sweet-potato. (Industrialist, May 29, 1886).

**Aramigus fulleri** *Horn.*— Feeds on the root of Roses. (Riley, Rep. U. S. Dept. Agricul., 1878).

Cyphomimus dorsalis *Horn.*—Beaten from budding Oak, (Popenoe, Trans. Kans. Ac. Sc., Vol. v, p. 38). Found on *Prunus virginica* by Mr. Jülich. (Cat. Ins. N. J., p. 249). Polyphagus, on bushes, beaten in multitudes from many species. Habits unknown. (Hamilton).

Scythropus elegans Coup.—Is found on Pine according to Mr. W. H. Harrington. (Trans. Ottawa Field, Nat. Club, Vol. I., p. 33). Mr. F. H. Chittenden also found this beetle on Pine (P. strobus) at Ithaca, N. Y.

Eudiagogus pulcher Fah. and E. Rosenschældi Fah.—Both feed on Cassia occidentalis and C. obtusifolia. The former species I have taken in large numbers at Enterprise, Florida in May.

Sitones lineellus Gyll., S. flavecsens Marsh, and S. hispidulus Germ.—These three species are injurious to the Clover, living in the larval stage on the roots.

Ithycerus noveboracensis Forst.—Is found on White and Burr Oak. The larva bores in the tender twigs. I have also found the insect on hickory in its image state. Mr. W. H. Harrington found it on Beech. (Rep. Ent. Soc. Ont., p. 52). Dr. Hamilton writes me that he also found the beetle on cultivated Cherry, Pear and Apple trees.

Apion segnipes Say.—Found on Willow, especially when in flower. (Harrington, Can. Ent., Vol. xvi, p. 117). Breeds in the seed of *Tephrosia virginica*. (Leconte, Rhyn. N. Am., p. 411). Also found in the seeds of *Astragalus* by Say.

Apion herculanum Smith.—Occurs on the flowers of Viburnum accrifolia. (Hamilton, Can. Ent., Vol. xx, p. 67). Found on Cratagus by Mr. Jülich. (Cat. Ins., N. J., p. 250).

Apion rostrum Say.—Infests the seed-pods of Wild Indigo. (Baptisia tinctoria). Found on Sweet-fern by Mr. Jülich. (Cat. Ins. N. J., p. 250).

**Apion nigrum** *Hbst*,—Depredates the leaves of the Locust (*Robinia pseudacacia*).

Apion walshii Smith. (A languinosum Walsh).—Was bred from the gall of Cecidomyia strobiloides on the Willow. (Walsh, Proc. Ent. Soc. Phil., Vol. vi, p. 269). Infests the catkins of Birch (Betula nigra), in the larval state. (Schwarz, Proc. Ent. Soc. Wash., Vol. i, p. 11).

**Apion fraternum** *Smith*,—Was observed by Mr. Chittenden upon two species of *Lespedeva*,

Podapion gallicola *Riley*.—Makes a spherical or ovoid gall on Pine (*Pinus inops*), (Riley, Bull, Brooklyn, Ent. Soc., Vol. vi, p. 61). I have taken the galls of this insect in the vicinity of Washington, D. C. in June.

Phytonomus punctatus Fab.—Lives on the leaves of clover. I have also found it in abundance on Timothy Grass. P. nigrirostris Fab. also feeds on clover. P. comptus Say, lives on Polygonum and P. cximus on Rumex (Riley, Rep. Dept. Agricul. 1881–82, p. 171).

**Lepyrus geminatus** *Say*.—Common on Willow in the imago state. (Harrington, Can. Ent. Vol. XXIII, p. 23).

Listronotus latiusculus Boh.—Was found by Dr. C. M. Weed in all its stages in the stalks of Sagittaria variabilis. Mr. F. M. Chittenden found L. tuberosus Lee., L. caudatus Say, and L. appendiculatus Boh, while sweeping a small patch of aquatic plants composed entirely of Sagittaria and a species of Carex. L. appendiculatus, it is said, was found by Mr. Jülich breeding in the lower parts of the stems of some species of reed. L. caudatus and L. nebulosus Lee., occur together on Sagittaria according to Prof. Popenoe. (Trans. Kans. Ac. Sc., Vol. vi, p. 85). L. teretirostris Lee., is found in Reeds. L. squamiger Say. The larvæ live in the stems of Sagittaria variabilis. (Hamilton).

Macrops solutus Boh., and M. sparsus Say.—Both breed in the stems of Sagittaria variabilis.

**Pissodes strobi** *Peck*.—Is sometimes very destructive to the White Pine. The larva and imago were first described by Peck.

(Mass. Agricul, Reposit., Vol. 1v, p. 205). P. affinis Rand., also occur on Pine.

Pachylobius picivorus Germ,—Found under Pine bark in Florida. (Schwarz, Proc. Am. Phil. Soc., Vol. xviii),

**Hylobius pales** *IIIbst.*—Lives in Pine trees, beneath the bark, burrowing into and destroying the inner surface of the bark, and the tender newly formed wood often doing great damage to pine forests.

**Hilipus squamosus** *Lec.*—Occurs in the Southern States under Pine bark. Mr. Charles Dury informs me that the beetles bore in the budding shoots of Sassafras in Tennessee.

**Lixus rubellus** *Rand.*—Has been observed in considerable numbers clinging to the leaves and blossoms of *Polygonum amphibium* by Mr. F. M. Webster,

**Lixus parcus** *Lec.*—1s said by Dr. Riley to form galls on the stems of *Amelanchier*. (Proc. Ent. Soc. Wash., Vol. 1, p. 33).

**Lixus terminalis** *Lee.*—Found on *Polygonum amphibium* (Popenoe Trans, Kans, Ac. Sc., Vol. v, p. 38). Bred from the the stems of this plant by Prof. Forbes. (5th Rep. Nox. Ins. Illinois, p. 76).

**Lixus concavus** Sar.—Has been observed by Glover, burrowing in the foot stalks of Rhubarb or Pie-plant. (Rep. Com. Agricul, 1865, p. 90). I have also found it on a species of Rumex and also producing a gall-like swelling on the stalk of the Thistle, from which plant I bred the insect. Mr. F. M. Webster bred it from Wild Sunflower (Ent. Am., Vol. v, p. 11).

**Lixus macer** *Lec.*— Dr. Riley reared this species from *Cheno-podium hybridum*. Mr. Coquillett observed it ovipositing in Wild Sunflower, as also did Mr. Webster (Ent. Am., Vol. v, p. 11).

Cleonus calandroides Rand.—Lives in its earlier stages on the leaves of Cakile americana, as I am informed by Mr. A. Bolter, who found the species on this plant at Nantucket, Mass.

**Dorytomus mucidus** Sar.—Breeds in the blossoms of Cotton wood and develops very rapidly, (Riley). D. latiscollis Lec. is found on Poplar. (Jülich, Cat. Ins. N. J., p. 252). D. brevicollis Lec. common on Willow (Popenoe, Trans. Kans. Ac. Sc., Vol. vi, p. 85). Beaten in abundance from Willow growing on the river shore, (Hamilton).

Demoris constrictus S.ty.—Found on Sunflower (*Helianthus*) by Prof. Popenoe. (Trans. Kans. Ac. Sc., Vol. v, p. 39).

Barytychius discoideus Lee.—Breeds in the flower heads of Helenium tennifolium. (Schwarz, Bull. Brooklyn, Ent. Soc., Vol. vii, p. 84).

Barytychius amænus Sar.—Found on Rag-weed (Ambrosia) by Dr. Hamilton. (Can. Ent., Vol. xviii, p. 114).

Smicronyx griseus Lec. and S. tychoides Lec.—Both occur on Rag-weed. (Hamilton, Can. Ent., Vol. xvIII, p. 114).

**Tanysphyrus lemnæ** Fab.—Breeds in ponds on Lemnæ minor, the leaves of which the beetle perforates with round holes. (Hamilton).

Anchodemus angustus Lec.—Has been found by Mr. Harrington eating the leaves of a species of Sagittaria. (Can. Ent., Vol. XVI, p. 118).

**Strophosomus coryli** Fab.— Has been found on Sweet Birch (Betula lenta) by Mr. Bailey. Also taken by Mr. Angell on this plant.

Lissorhoptrus simplex Say.—Lives on the roots of Rice. (Riley, Rep. Dept. Agricul., p. 130, 1881–82).

Otidocephalus myrmex Hhst. and O. chevrolatii Horn.—Are beaten abundantly from Hickory, Grape, Hazel and other plants. (Hamilton). O. dichrous Lec. was found on dead Palmetto leaves in Florida and O. myrmex on Oak. (Schwarz, Proc. Am. Phil. Soc., Vol. xvIII, p. 465). O. chevrolatti occurs on Elm and Hickory according to Mr. Harrington. (Can. Ent. Vol. xvI, p. 118.) O. hevicollis Horn, was bred by Dr. Riley from galls of a species of Crnips on Oak. According to Dr. Hamilton the beetle is abundant on Hickory.

Magdalis barbita Say.—Bred from dead Elm (Ulmus Americana) by Dr. Hamilton. Has been found ovipositing in fallen Hickory (Hickoria amara) by Mr. Harrington. (Ent. Am., Vol. 1, p. 18).

Magdalis olyra *Hbst.*—Bred from dead Hickory in multitudes by Dr. Hamilton. Also burrows under the bark of Oak.

Magdalis armicollis Say.—Inhabits the Elm. M. pandura Say was bred from the same plant and also from Hickory by Dr. Hamilton.

Magdalis alutacea Lec.—Probably bores in the terminal twigs of *Pinus inops*. (Riley, Bull. Brooklyn Ent. Soc., Vol. vi, p. 62).

Magdalis salicis *Horn.*—Bred from the wood of Chestnut by Mr. Chittenden. (5th Rep. U. S. Ent. Com., p. 342).

Magdalis lecontei *Horn*.—Found upon young Pines by Mr. Harrington (Can. Ent., Vol. XXIII, p. 24).—Also taken on Pine by Mr. C. U. Clark.

**Acalyptus carpini** *Hbts*,—1s found Willow when in bloom, (Harrington Can. Ent., xxIII, p. 25).

Coccotorus scutellaris Lec.—Attacks the fruit of the Plum.

Anthonomus elegans Lec.—Found on Scrub Oak in Florida. (Schwarz, Proc. Am. Phil. Soc., Vol. xviii).

**Anthonomus quadrigibbus** Say.—Punctures the fruit of the Apple and Pear. The larva lives in the heart of the fruit, and feeds around the core.

Anthonomus juniperinus Sanb.—Larva lives in Podysomu, a parasitic fungus on Juniper. (Sanborn, Proc. Bost. Soc. Nat. Hist., Vol. xII, p. 82).

(TO BE CONTINUED).

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## LOCAL ENTOMOLOGICAL NOTES.

Members of the New York Entomological Society and all others, are solicited to contribute to this column, their rare captures, local lists and other items of interest relating to the insect fauna of New York City and vicinity.

## CATALOGUE OF THE BUTTERFLIES OF STATEN ISLAND, NEW YORK.

By William T. Davis.

Though the notes from which this catalogue have been compiled extend over a number of years, it must, nevertheless be considered as only partly complete. Every season has added something of interest in the past and no doubt a number of additions are yet to be made. Indeed the years do not resemble one another to a butterfly collector; his memory is checkered with unexpected visitations of particular species, and he goes afield ever expecting a surprise. Thus to Staten Island, 1880 brought a countless number of the orange colored *Terias nicippe*, and 1884 of *Pyrameis cardui*. In all other respects 1884 was a remarkably poor butterfly year.